

Appln No. 10/628,026

Amdt date December 28, 2006

Reply to Office action of September 28, 2006

### REMARKS/ARGUMENTS

The above identified patent application has been amended and reconsideration and reexamination are hereby requested. Claims 1-25 are now in the application. Claims 1, 6, 7, 12, 15, 20 and 21 have been amended. A new Claim 25 has been added. The Applicants have also amended the specification. No new matter has been added.

The Examiner has rejected Claims 1-4, 6-7, 11-18, 20-21, and 24 under 35 U.S.C. §102(e) as allegedly being anticipated by Hedin et al. (Pub. No.: US 2003/0108071). The Applicants request that the rejection of these claims be withdrawn in view of the following.

In order to expedite the prosecution of the application, independent claims 1, 12 and 15 have been amended to incorporate an additional patentably distinguishing feature of an embodiment of the invention. As can be seen in FIGs. 2 and 4 of the instant application, the monitor photodetector 220 is configured such that the second portion of the optical transmission beam enters into the monitor photodetector at the light receiving facet. The second portion of the optical transmission beam is then applied at a light detection area adjacent another facet of the monitor photodetector. In the embodiment illustrated in FIGs. 2 and 4, the light receiving facet is located at a side edge of the monitor photodetector and the light detection area is located adjacent the top surface of the monitor photodetector.

The Applicants' independent claim 1 calls for (underlining added for emphasis) "a reflective mirror adapted to reflect a first portion of the optical transmission beam to an end face of an optical fiber" and "a monitor photodetector, having a light receiving facet adapted to receive a second portion of the optical transmission beam, the monitor photodetector being configured such that the second portion of the optical transmission beam enters the light receiving facet of the monitor photodetector to be applied at a light detection area adjacent another facet of the monitor photodetector."

The Applicants' independent claim 12 calls for (underlining added for emphasis) "reflecting a first portion of the optical signal to an end face of an optical fiber" and "receiving a second portion of the optical signal on a light receiving facet of a monitor photodetector, wherein the second portion of the optical signal enters the light receiving facet of the monitor

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photodetector and is applied at a light detection area adjacent another facet of the monitor photodetector."

The Applicants' independent claim 15 calls for (underlining added for emphasis) "a reflective mirror adapted to reflect a first portion of the optical transmission beam emitted from the first facet of the laser diode to an end face of an optical fiber" and "a monitor photodetector, having a light receiving facet adapted to receive a second portion of the optical transmission beam emitted from the first facet of the laser diode, the monitor photodetector being configured such that the second portion of the optical transmission beam enters the light receiving facet of the monitor photodetector to be applied at a light detection area adjacent another facet of the monitor photodetector."

To anticipate a claim, the reference must teach every element of the claim. Therefore, all claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. §102.

In rejecting these independent claims 1, 12 and 15, the Examiner contends "Hedin teaches an apparatus and method for laser communication device (see abstract), a laser diode emitting an optical transmission beam (see figure 2 laser 202, light beam 204); a reflective mirror that reflects a first portion of the optical transmission beam to an end face of an optical fiber (see figure 3 beam splitter 312' output fiber 322); and an edge illumination monitor photo detector (see figure 2 detector 206), having a light receiving facet that receives a second portion of the optical transmission beam . . ." (emphasis added).

Here, the Examiner appears to equate the  $\lambda$  detector (or wavelength detector unit) 206 in FIG. 2 of Hedin et al. with the monitor photodetector in the claims of the instant application. However, even if we were to concede that the  $\lambda$  detector 206 is equivalent to the monitor photodetector in the claims of the instant application, Hedin et al. does not teach or suggest that the  $\lambda$  detector 206 is configured such that a second portion of the optical transmission beam enters the light receiving facet of the monitor photodetector to be applied at a light detection area adjacent another facet of the monitor photodetector, nor does it disclose that a second portion of

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the optical signal enters the light receiving facet of the monitor photodetector and is applied at a light detection area adjacent another facet of the monitor photodetector.

Accordingly, the Applicants submit that Claims 1, 12, and 15 are not anticipated by Hedin et al. under 35 U.S.C. §102(e). Claims 2-4 and 6-7 are dependent on Claim 1, and therefore include all of the limitations of Claim 1 and additional limitations therein. Claims 13 and 14 are dependent on Claim 12, and therefore include all of the limitations of Claim 12 and additional limitations therein. Claims 16-18, 20-21 and 24 are dependent on Claim 15, and therefore include all of the limitations of Claim 15 and additional limitations therein. Accordingly, these claims are allowable over the cited reference as being dependent from an allowable independent claim and for additional limitations they include therein, which further patentably distinguish them over the cited references. Therefore, it is respectfully requested that the rejection of claims 2-4, 6-7, 16-18, 20-21 and 24 be withdrawn.

Claims 8 and 22 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hedin et al. in view of Deines (Pub. No.: US 2004/0109155). Deines is being cited here for the proposition that it teaches a laser diode isolator disposed between the focusing lens and the optical fiber.

Three criteria must be met, however, in order to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference, or combination of references, must teach or suggest all the claim limitations. (Emphasis Added, MPEP § 2142).

First, Deines does not teach or suggest "a monitor photodetector, having a light receiving facet adapted to receive a second portion of the optical transmission beam, the monitor photodetector being configured such that the second portion of the optical transmission beam enters the light receiving facet of the monitor photodetector to be applied at a light detection area adjacent another facet of the monitor photodetector." Therefore, even if Hedin et al. and Deines could be combined, they together would not disclose all the limitations of Claims 1 and 15.

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Secondly, Hedin et al. and Deines do not provide any motivation to combine these references. Therefore, a *prima facie* case of obviousness cannot be established for Claims 1 and 15 over Hedin et al. and Deines. Therefore, Claims 1 and 15 are patentably distinguishable over Hedin et al. and Deines.

Claim 8 is dependent on Claim 1, and therefore includes all of the limitations of Claim 1 and additional limitations therein. Claim 22 is dependent on Claim 15, and therefore includes all of the limitations of Claim 15 and additional limitations therein. Accordingly, these claims are allowable over the cited reference as being dependent from an allowable independent claim and for additional limitations they include therein, which further patentably distinguish them over the cited references. Therefore, it is respectfully requested that the rejection of claims 8 and 22 be withdrawn.

Claims 5, 9, 10, 19 and 23 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hedin et al. in view of Heiney (US 6,925,256). Heiney is being cited here for the proposition that it teaches that "the monitor photo detector comprises a Fabry Perot p-i-n detector filter," "the monitor photo detector is coupled to the reflective mirror," and "an angle of about 45 degrees relative to the TO header." However, Heiney does not teach or suggest "the monitor photodetector being configured such that the second portion of the optical transmission beam enters the light receiving facet of the monitor photodetector to be applied at a light detection area adjacent another facet of the monitor photodetector." (emphasis added).

Therefore, Heiney and Hedin et al. together do not teach or suggest all limitations of Claims 1 and 15, and there is no motivation to combine Heiney with Hedin et al. or any other reference to reject the claims of the instant application. Therefore, a *prima facie* case of obviousness cannot be established for Claims 1 or 15 over Hedin et al. and Heiney. Therefore, Claims 1 and 15 are patentably distinguishable over Hedin et al. and Heiney.

Claims 5, 9 and 10 are dependent on Claim 1, and therefore includes all of the limitations of Claim 1 and additional limitations therein. Claims 19 and 23 are dependent on Claim 15, and therefore includes all of the limitations of Claim 15 and additional limitations therein. Accordingly, these claims are allowable over the cited reference as being dependent from an


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allowable independent claim and for additional limitations they include therein, which further patentably distinguish them over the cited references. Therefore, it is respectfully requested that the rejection of claims 5, 9, 10, 19 and 23 be withdrawn.

The newly added Claim 25 recites "the monitor photodetector is configured to receive the second portion of the optical transmission beam directly from the laser diode." Applicants submit that this limitation further patentably distinguish this claim over the cited references.

Therefore, in view of the above amendment and remarks it is submitted that Claims 1-25 are patentably distinct over the prior art and that all the rejections to the claims have been overcome. As such, allowance of the above Application is requested. If there are any remaining issues that can be addressed over the telephone, the Examiner is cordially invited to call the Applicants' attorney at the number listed below.

Respectfully submitted,  
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